

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/518,341  
Source: PCT  
Date Processed by STIC: 1-5-05

# ***ENTERED***

**CRF Errors Edited by the STIC Systems  
Branch**

Serial Number: 10/S18,341

CRF Edit Date: 1-5-05  
Edited by: YCL

     Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

     Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

     Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

\_\_\_\_\_

✓ Deleted: ✓ invalid beginning/end-of-file text ;      page numbers

     Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

     Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_\_\_

     Other:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



PCT

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/518,341

DATE: 01/05/2005

TIME: 11:04:03

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\01052005\J518341.raw

5 <110> APPLICANT: VAN ELS, Cecile Antoinette Carola Maria  
6 VAN BLEEK, Gerarda Maria  
7 BOOG, Marie-Claire Josefa Pia  
9 <120> TITLE OF INVENTION: MHC class II haplotype specific immunodominancy of  
10 peptides derived from RSV fusion (F) or attachment  
11 (G) proteins  
15 <130> FILE REFERENCE: 28902.0014  
C--> 17 <140> CURRENT APPLICATION NUMBER: US/10/518,341  
18 <141> CURRENT FILING DATE: 2004-12-17  
20 <150> PRIOR APPLICATION NUMBER: PCT/NL03/00454  
21 <151> PRIOR FILING DATE: 2003-06-20  
23 <150> PRIOR APPLICATION NUMBER: EP 02077461.8  
24 <151> PRIOR FILING DATE: 2002-06-20  
26 <160> NUMBER OF SEQ ID NOS: 29  
30 <170> SOFTWARE: PatentIn version 3.1  
34 <210> SEQ ID NO: 1  
36 <211> LENGTH: 574  
38 <212> TYPE: PRT  
40 <213> ORGANISM: respiratory syncytial virus  
44 <400> SEQUENCE: 1  
46 Met Glu Leu Leu Ile Leu Lys Ala Asn Ala Ile Thr Thr Ile Leu Thr  
47 1 5 10 15  
50 Ala Val Thr Phe Cys Phe Ala Ser Gly Gln Asn Ile Thr Glu Glu Phe  
51 20 25 30  
54 Tyr Gln Ser Thr Cys Ser Ala Val Ser Lys Gly Tyr Leu Ser Ala Leu  
55 35 40 45  
58 Arg Thr Gly Trp Tyr Thr Ser Val Ile Thr Ile Glu Leu Ser Asn Ile  
59 50 55 60  
62 Lys Glu Asn Lys Cys Asn Gly Thr Asp Ala Lys Val Lys Leu Ile Lys  
63 65 70 75 80  
66 Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu  
67 85 90 95  
70 Met Gln Ser Thr Pro Pro Thr Asn Asn Arg Ala Arg Arg Glu Leu Pro  
71 100 105 110  
74 Arg Phe Met Asn Tyr Thr Leu Asn Asn Ala Lys Lys Thr Asn Val Thr  
75 115 120 125  
78 Leu Ser Lys Lys Arg Lys Arg Phe Leu Gly Phe Leu Leu Gly Val  
79 130 135 140  
82 Gly Ser Ala Ile Ala Ser Gly Val Ala Val Ser Lys Val Leu His Leu  
83 145 150 155 160  
86 Glu Gly Glu Val Asn Lys Ile Lys Ser Ala Leu Leu Ser Thr Asn Lys  
87 165 170 175  
90 Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser Lys Val

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91          180          185          190
94 Leu Asp Leu Lys Asn Tyr Ile Asp Lys Gln Leu Leu Pro Ile Val Asn
95          195          200          205
98 Lys Gln Ser Cys Ser Ile Ser Asn Ile Glu Thr Val Ile Glu Phe Gln
99          210          215          220
102 Gln Lys Asn Asn Arg Leu Leu Glu Ile Thr Arg Glu Phe Ser Val Asn
103 225          230          235          240
106 Ala Gly Val Thr Thr Pro Val Ser Thr Tyr Met Leu Thr Asn Ser Glu
107          245          250          255
110 Leu Leu Ser Leu Ile Asn Asp Met Pro Ile Thr Asn Asp Gln Lys Lys
111          260          265          270
114 Leu Met Ser Asn Asn Val Gln Ile Val Arg Gln Gln Ser Tyr Ser Ile
115          275          280          285
118 Met Ser Ile Ile Lys Glu Glu Val Leu Ala Tyr Val Val Gln Leu Pro
119          290          295          300
122 Leu Tyr Gly Val Ile Asp Thr Pro Cys Trp Lys Leu His Thr Ser Pro
123 305          310          315          320
126 Leu Cys Thr Thr Asn Thr Lys Glu Gly Ser Asn Ile Cys Leu Thr Arg
127          325          330          335
130 Thr Asp Arg Gly Trp Tyr Cys Asp Asn Ala Gly Ser Val Ser Phe Phe
131          340          345          350
134 Pro Gln Ala Glu Thr Cys Lys Val Gln Ser Asn Arg Val Phe Cys Asp
135          355          360          365
138 Thr Met Asn Ser Leu Thr Leu Pro Ser Glu Ile Asn Leu Cys Asn Val
139          370          375          380
142 Asp Ile Phe Asn Pro Lys Tyr Asp Cys Lys Ile Met Thr Ser Lys Thr
143 385          390          395          400
146 Asp Val Ser Ser Ser Val Ile Thr Ser Leu Gly Ala Ile Val Ser Cys
147          405          410          415
150 Tyr Gly Lys Thr Lys Cys Thr Ala Ser Asn Lys Asn Arg Gly Ile Ile
151          420          425          430
154 Lys Thr Phe Ser Asn Gly Cys Asp Tyr Val Ser Asn Lys Gly Met Asp
155          435          440          445
158 Thr Val Ser Val Gly Asn Thr Leu Tyr Tyr Val Asn Lys Gln Glu Gly
159          450          455          460
162 Lys Ser Leu Tyr Val Lys Gly Glu Pro Ile Ile Asn Phe Tyr Asp Pro
163 465          470          475          480
166 Leu Val Phe Pro Ser Asp Glu Phe Asp Ala Ser Ile Ser Gln Val Asn
167          485          490          495
170 Glu Lys Ile Asn Gln Ser Leu Ala Phe Ile Arg Lys Ser Asp Glu Leu
171          500          505          510
174 Leu His Asn Val Asn Ala Gly Lys Ser Thr Thr Asn Ile Met Ile Thr
175          515          520          525
178 Thr Ile Ile Ile Val Ile Ile Val Ile Leu Leu Ser Leu Ile Ala Val
179          530          535          540
182 Gly Leu Leu Leu Tyr Cys Lys Ala Arg Ser Thr Pro Val Thr Leu Ser
183 545          550          555          560
186 Lys Asp Gln Leu Ser Gly Ile Asn Asn Ile Ala Phe Ser Asn
187          565          570

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```

190 <210> SEQ ID NO: 2
192 <211> LENGTH: 306
194 <212> TYPE: PRT
196 <213> ORGANISM: respiratory syncytial virus
200 <400> SEQUENCE: 2
202 Met Ser Lys Asn Lys Asp Gln Arg Thr Ala Lys Thr Leu Glu Arg Thr
203 1 5 10 15
206 Trp Asp Thr Leu Asn His Leu Leu Phe Ile Ser Ser Cys Leu Tyr Lys
207 20 25 30
210 Leu Asn Leu Lys Ser Val Ala Gln Ile Thr Leu Ser Ile Leu Ala Met
211 35 40 45
214 Ile Ile Ser Thr Ser Leu Ile Ile Ala Ala Ile Ile Phe Ile Ala Ser
215 50 55 60
218 Ala Asn His Lys Val Thr Pro Thr Thr Ala Ile Ile Gln Asp Ala Thr
219 65 70 75 80
222 Ser Gln Ile Lys Asn Thr Thr Pro Thr Tyr Leu Thr Gln Asn Pro Gln
223 85 90 95
226 Leu Gly Ile Ser Pro Ser Asn Pro Ser Glu Ile Thr Ser Gln Ile Thr
227 100 105 110
230 Thr Ile Leu Ala Ser Thr Thr Pro Gly Val Lys Ser Thr Leu Gln Ser
231 115 120 125
234 Thr Thr Val Lys Thr Lys Asn Thr Thr Thr Thr Gln Thr Gln Pro Ser
235 130 135 140
238 Lys Pro Thr Thr Lys Gln Arg Gln Asn Lys Pro Pro Ser Lys Pro Asn
239 145 150 155 160
242 Asn Asp Phe His Phe Glu Val Phe Asn Phe Val Pro Cys Ser Ile Cys
243 165 170 175
246 Ser Asn Asn Pro Thr Cys Trp Ala Ile Cys Lys Arg Ile Pro Asn Lys
247 180 185 190
250 Lys Pro Gly Lys Lys Thr Thr Thr Lys Pro Thr Lys Lys Pro Thr Leu
251 195 200 205
254 Lys Thr Thr Lys Lys Asp Pro Lys Pro Gln Thr Thr Lys Ser Lys Glu
255 210 215 220
258 Val Pro Thr Thr Lys Pro Thr Glu Glu Pro Thr Ile Asn Thr Thr Lys
259 225 230 235 240
262 Thr Asn Ile Ile Thr Thr Leu Leu Thr Ser Asn Thr Thr Gly Asn Pro
263 245 250 255
266 Glu Leu Thr Ser Gln Met Glu Thr Phe His Ser Thr Ser Ser Glu Gly
267 260 265 270
270 Asn Pro Ser Pro Ser Gln Val Ser Thr Thr Ser Glu Tyr Pro Ser Gln
271 275 280 285
274 Pro Ser Ser Pro Pro Asn Thr Pro Arg Gln Ser Pro Pro Asn Thr Pro
275 290 295 300
278 Arg Gln
279 305
282 <210> SEQ ID NO: 3
284 <211> LENGTH: 17
286 <212> TYPE: PRT
288 <213> ORGANISM: respiratory syncytial virus

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```

292 <400> SEQUENCE: 3
294 Lys Ala Asn Ala Ile Thr Ile Leu Thr Ala Val Thr Phe Cys Phe Ala
295 1          5          10          15
298 Ser
302 <210> SEQ ID NO: 4
304 <211> LENGTH: 18
306 <212> TYPE: PRT
308 <213> ORGANISM: respiratory syncytial virus
312 <400> SEQUENCE: 4
314 Thr Ile Leu Thr Ala Val Thr Phe Cys Phe Ala Ser Gly Gln Asn Ile
315 1          5          10          15
318 Thr Glu
322 <210> SEQ ID NO: 5
324 <211> LENGTH: 18
326 <212> TYPE: PRT
328 <213> ORGANISM: respiratory syncytial virus
332 <400> SEQUENCE: 5
334 Gly Gln Asn Ile Thr Glu Glu Phe Tyr Gln Ser Thr Cys Ser Ala Val
335 1          5          10          15
338 Ser Lys
342 <210> SEQ ID NO: 6
344 <211> LENGTH: 18
346 <212> TYPE: PRT
348 <213> ORGANISM: respiratory syncytial virus
352 <400> SEQUENCE: 6
354 Glu Phe Tyr Gln Ser Thr Cys Ser Ala Val Ser Lys Gly Tyr Leu Ser
355 1          5          10          15
358 Ala Leu
362 <210> SEQ ID NO: 7
364 <211> LENGTH: 18
366 <212> TYPE: PRT
368 <213> ORGANISM: respiratory syncytial virus
372 <400> SEQUENCE: 7
374 Ser Val Ile Thr Ile Glu Leu Ser Asn Ile Lys Glu Asn Lys Cys Asn
375 1          5          10          15
378 Gly Thr
382 <210> SEQ ID NO: 8
384 <211> LENGTH: 18
386 <212> TYPE: PRT
388 <213> ORGANISM: respiratory syncytial virus
392 <400> SEQUENCE: 8
394 Ile Lys Gln Glu Leu Asp Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln
395 1          5          10          15
398 Leu Leu
402 <210> SEQ ID NO: 9
404 <211> LENGTH: 18
406 <212> TYPE: PRT
408 <213> ORGANISM: respiratory syncytial virus
412 <400> SEQUENCE: 9

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414 Lys Tyr Lys Asn Ala Val Thr Glu Leu Gln Leu Leu Met Gln Ser Thr
415 1          5          10          15
418 Pro Pro
422 <210> SEQ ID NO: 10
424 <211> LENGTH: 18
426 <212> TYPE: PRT
428 <213> ORGANISM: respiratory syncytial virus
432 <400> SEQUENCE: 10
434 Asn Lys Ala Val Val Ser Leu Ser Asn Gly Val Ser Val Leu Thr Ser
435 1          5          10          15
438 Lys Val
442 <210> SEQ ID NO: 11
444 <211> LENGTH: 18
446 <212> TYPE: PRT
448 <213> ORGANISM: respiratory syncytial virus
452 <400> SEQUENCE: 11
454 Arg Leu Leu Glu Ile Thr Arg Glu Phe Ser Val Asn Ala Gly Val Thr
455 1          5          10          15
458 Thr Pro
462 <210> SEQ ID NO: 12
464 <211> LENGTH: 18
466 <212> TYPE: PRT
468 <213> ORGANISM: respiratory syncytial virus
472 <400> SEQUENCE: 12
474 Arg Glu Phe Ser Val Asn Ala Gly Val Thr Thr Pro Val Ser Thr Tyr
475 1          5          10          15
478 Met Leu
482 <210> SEQ ID NO: 13
484 <211> LENGTH: 18
486 <212> TYPE: PRT
488 <213> ORGANISM: respiratory syncytial virus
492 <400> SEQUENCE: 13
494 Pro Ile Thr Asn Asp Gln Lys Lys Leu Met Ser Asn Asn Val Gln Ile
495 1          5          10          15
498 Val Arg
502 <210> SEQ ID NO: 14
504 <211> LENGTH: 17
506 <212> TYPE: PRT
508 <213> ORGANISM: respiratory syncytial virus
512 <400> SEQUENCE: 14
514 Lys Leu Met Ser Asn Asn Val Gln Ile Val Arg Gln Gln Ser Tyr Ser
515 1          5          10          15
518 Ile
522 <210> SEQ ID NO: 15
524 <211> LENGTH: 18
526 <212> TYPE: PRT
528 <213> ORGANISM: respiratory syncytial virus
532 <400> SEQUENCE: 15
534 Glu Val Leu Ala Tyr Val Val Gln Leu Pro Leu Tyr Gly Val Ile Asp

```

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/518,341

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Input Set : A:\pto.kd.txt

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L:17 M:270 C: Current Application Number differs, Replaced Current Application Number